

**DEPARTMENT OF DEFENSE
DEPARTMENT OF THE ARMY**

WASHINGTON, D.C.

**Revision: 3
Date: May 22, 2003**

**PRIMARY MISSION EQUIPMENT LIST
(PMEL)**

M-4

Airborne Reconnaissance Low

DE HAVILLAND DHC-7

**RC-7B
Serial Number
85 (N177RA) M4**

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Preamble

Except as provided in mission SOPs or under the provisions of approved Statements of Work (SOW), all equipment installed on an aircraft will be in compliance with the airworthiness standards or appropriate operating rules.

This INSCOM approved Primary Mission Equipment List (PMEL) includes only those items of equipment which the Commander finds may be inoperative and yet maintain an acceptable level of safety and operational mission capability. The PMEL is used as an operator guideline, which will permit operation of the aircraft with inoperative equipment or systems.

For each listed item, the installed mission equipment configuration considered being normal for the aircraft is specified. These items must be operational for dispatch for that particular mission configuration. Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures, and other restrictions, as necessary, are required to be accomplished by the operator to ensure that an acceptable level of safety is maintained. Those procedures are listed and should be followed as closely as possible in the interest of: 1. Safety, 2. Operational/mission necessity, and 3. Convenience.

The PMEL is intended to permit operations with inoperative items of equipment for the minimum period of time necessary for mission accomplishment until repairs can be effected. It is important that repairs be accomplished at the earliest opportunity in order to return the aircraft to its mission design level of safety and reliability. Inoperative equipment in all cases must be repaired, or inspected and deferred, by qualified personnel at the earliest opportunity. Although this time is normally prior to the next mission period, common sense, mission location, and mission impact may be overriding factors. This PMEL does not supersede contractual agreements or requirements, but provides reasonable guidelines in daily operations.

The PMEL provides for release of the aircraft for flight with inoperative mission equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the aircraft maintenance record. The item is then either repaired or deferred per the PMEL or other approved means acceptable to the commander prior to further operation. In addition to the specific PMEL conditions and limitations, determination by the mission operator that the aircraft is in a condition for safe operations under anticipated flight conditions must be made for all items of inoperative equipment. When these requirements are met, the aircraft may be considered airworthy and used for continued service. Operators, and then the CORs, are responsible for exercising the necessary operational control to ensure that an acceptable level of safety is maintained. When operating with multiple inoperative items, the interrelationship between those items and the effect on mission operation and crew workload must be considered.

For mission requirements, if all items required for the airframe are functioning, the aircraft is considered Fully Mission Capable (FMC). When items listed here are inoperative, the system is at least Partially Mission Capable (PMC). If critical to mission success, the system may be Not Mission Capable (NMC). If not mission capable, make a red X status symbol entry on the appropriate maintenance record. If deferred in accordance with (IAW) the PMEL, then the status should be re-entered as a properly authorized circle red-X. An entry must be made on the appropriate maintenance form/record. It must state that the aircraft will be operated IAW the operating limitations imposed by the PMEL to include the PMEL item number. Maintenance procedures must be performed and documented in the maintenance records. The COR will regulate the critical items for mission requirements.

Unit Commanders have the latitude and authority to reconfigure the aircraft per critical theater requirements. The commander will inform INSCOM of any changes in a timely manner.

Forward

When placarded items in the aircraft are either inoperative or require modified procedures, it is important to remember some guidelines. First, the placard must be of sufficient size so that the crew can readily see and understand the writing. The adopted requirement is that the words used on the placard must be "at least" 1/8 inch high. The lettering may be larger but not smaller.

Secondly, the placard should contain enough information so that the crew can understand the placard's intent, or are directed easily to a source where that intent is fully and readily explained. For instance, the placard example below illustrates an acceptable method of a placard.

Placard sample:

"Inoperative Encryption Device, see PMEL 140-1"

Finally, the placard should be placed as close as practicable to the effected control, switch, or equipment as appropriate.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM		
	2. NUMBER INSTALLED		
	3. NUMBER REQUIRED FOR DISPATCH		
	4. REMARKS OR EXCEPTIONS		
110. RADAR MISSION HISAR Radar			
1. Moving Target Indicator (MTI)	1	1	Complete HISAR Radar system must be operational.
1) Workstation 3 or 4	2	1	(O) (M) The following limitations apply: a) The 19" monitor must be operational. b) The S-Bus Cable is not required for MTI. c) The INS and GPS must be operational. d) The Mass Storage Unit (MSU) must be operational. e) The Power Distribution Unit (PDU) must be operational. f) The work station processor (VME) must be operational.
2) Workstation 4	1	1	Power Distribution Unit (PDU) must be operational.
3) Cockpit Mission Power Panel	1	1	NOTE: This is an airframe item, which is mission critical.
4) Supervisor Status Panel	1	1	NOTE: Ensure that the downlink antenna indicator located on the Supervisor's Status Panel is operational.
5) Generators	4	2	For RADAR missions, generators two and three must be operational.

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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HISAR Moving Target Indicator Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

SYSTEM & SEQUENCE NUMBERS		1. ITEM		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS	
110. RADAR MISSION (HISAR Continued)		2. Synthetic Aperture RADAR Mission (SAR)							
		1) HISAR	1	1				Complete HISAR Radar system must be operational.	
		2) Workstation 3	1	1				(O) (M) The following limitations apply: a) The 19" monitor must be operational. (Lower) b) The S-Bus Cable is required for SAR. c) The INS and GPS must be operational. d) The Mass Storage Unit (MSU) must be operational. e) The Power Distribution Unit (PDU) must be operational. f) The work station processor (VME) must be operational.	
		3) Workstation 4	1	1				(O) (M) The Power Distribution Unit (PDU) must be operational.	
		4) Cockpit Mission Power Panel	1	1				NOTE: This is an airframe item, which is mission critical.	
		5) Supervisor Status Panel	1	0					
		6) Generators	4	2				For RADAR missions, generators two and three must be operational.	

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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HISAR Synthetic Aperture RADAR Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM			
			2. NUMBER INSTALLED	
			3. NUMBER REQUIRED FOR DISPATCH	
			4. REMARKS OR EXCEPTIONS	
110.	RADAR MISSION Lynx Radar			
3.	Moving Target Indicator (MTI)	0	Not installed.	
1)	Workstation 3	1	1	(O) (M) The following limitations apply: a) The 19" monitor must be operational. (Lower) b) The ART-1550 Workstation Chasis must be operational. c) The Power Distribution Unit (PDU) must be operational.
2)	Cockpit Mission Power Panel	1	1	NOTE: This is an airframe item, which is mission critical.
3)	Generators	4	4	For RADAR missions, generators two and three must be operational.

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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Lynx Moving Target Indicator Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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SYSTEM & SEQUENCE NUMBERS		1. ITEM		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS	
110. RADAR MISSION (Lynx Continued)		4. Synthetic Aperture RADAR Mission (SAR)							
1) Lynx		1		1		1		Complete Lynx Radar system must be operational.	
2) Workstation 3		1		1		1		(O) (M) The following limitations apply: a) The 19" monitor must be operational. (Lower) b) The ART-1550 Workstation Chasis must be operational. c) The Power Distribution Unit (PDU) must be operational.	
3) Cockpit Mission Power Panel		1		1		1		NOTE: This is an airframe item, which is mission critical.	
4) Generators		0						Not installed.	

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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Lynx Synthetic Aperture RADAR Continued —

Maintenance Procedures

8. Verify defective equipment, cables, and components.
9. Remove defective components.
10. Tie-back all cables (if applicable).
11. Cap/protect all cable connections.
12. Pull circuit breaker (if applicable).
13. Place tie-wrap around circuit breaker (as appropriate).
14. Make entry in the appropriate maintenance manual.

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SYSTEM & SEQUENCE NUMBERS		1. ITEM		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS	
120. ELECTRO OPTICAL (EO)		1. M-20 Imaging System		1	1			NOTE 1: Based upon mission requirements, one or more of the sensors (EON, EOW, FLIR) can be inoperative if installed. NOTE 2: The requirement will be as required by permission configuration. See PMEL Preamble, second paragraph, for guidance.	
		1) Workstation 1		1	1			(O) (M) The sensor power distribution unit must be operational.	
		2) Workstation 3		1	1			(O) (M) The following are required for operations: a) The Power Distribution Unit (PDU) must be operational. b) The power for the video switch matrix must be operational.	
		3) Workstation 4		2	1			(O) (M) The following are required for operations: a) The MSU must be operational. b) The work station processor (VME) must be operational. c) The Power Distribution Unit (PDU) must be operational. d) The Operator Control Unit (OCU) must be operational. e) The MX20 Handgrip must be operational.	
		4) Cockpit Mission Power Panel		1	1			NOTE: This is an airframe item, which is mission critical.	
		5) Supervisor Status Panel		1	1			NOTE: With regard to mission power sensor status lights-- the indicator in the Supervisor's Status Power Panel must be operational or verification of deployment is made using cockpit mission panel indicator.	
		6) Generators		4	2			For HISAR missions, generators two and three must be operational.	

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

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M-20 Imaging System Continued —

Operating Procedures

Prior to mission initiation:

1. If time permits or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS	
130. DATA DOWNLINK								
1. ASL								
1) VHF/UHF/ SATCOM	2	1						
2) Encryption Devices	3	1					NOTE Embedded encryption devices for radios are required.	
3) Antenna	3	1					Corresponding antenna	
4) Workstation 4	1	1					(O) (M) The following are required for operations: a) The Power Distribution Unit (PDU) must be operational. b) The VHF/UHF control head must be operational.	
5) Patch Panels	2	2					Both Red and Black are required.	
6) Cockpit Mission Power Panel	1	1					NOTE: This is an airframe item, which is mission critical.	
7) Generators	4	2					For RADAR missions, generators two and three must be operational.	

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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MTI Data Downlink Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM		
	2. NUMBER INSTALLED		
	3. NUMBER REQUIRED FOR DISPATCH		
	4. REMARKS OR EXCEPTIONS		
130. DATA DOWNLINK (DL) (Continued)			
2. SAR/Freeze Frame			
1) PME-2	1	1	NOTE: Radios as required by mission. (O) May be used provided the following: a) The VDC-300 must be operational. b) The red patch panel must be operational.
2) Antenna	2	1	(O) (M) Appropriate antenna for the mission must be operational.
3) Workstation 3 or 4	2	1	(O) The workstation must be fully operational.
4) Workstation 4	1	1	Work Station 4 PDU must be operational. Radio control heads.
5) Cockpit Mission Power Panel	1	1	NOTE: This is an airframe item, which is mission critical.
6) Supervisor Status Panel	1	1	
7) Generators	4	2	For HISAR missions, generators two and three must be operational.

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits, or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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SAR Freeze Frame Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM			
			2. NUMBER INSTALLED	
			3. NUMBER REQUIRED FOR DISPATCH	
			4. REMARKS OR EXCEPTIONS	
130. DATA DOWNLINK (DL) (Continued)				
3. Live Video (BMS)				
1) PME – 2	1	1	(O) (M) L – Band Transmitter must be fully functional for live video downlink.	
2) Antenna	1	1		
3) Workstation 4	1	1	(O) (M) The Power Distribution Unit (PDU) must be operational.	
4) Cockpit Mission Power Panel	1	1	NOTE: This is an airframe item, which is mission critical.	
5) Supervisor Status Panel	1	1	NOTE: With regard to mission power sensor status lights--the indicator in the Supervisor's Status Power Panel must be operational or verification of deployment is made using cockpit mission panel indicator.	
6) Generators	4	2	For RADAR missions, generators two and three must be operational.	

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits, or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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Live Video (BMS) Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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SYSTEM & 1. ITEM SEQUENCE NUMBERS				
		2. NUMBER INSTALLED		
		3. NUMBER REQUIRED FOR DISPATCH		
		4. REMARKS OR EXCEPTIONS		
140.	VOICE-COMS (LOS)	2	1	Embedded Encryption
	UHF/VHF (ARC 210)	2	1	Embedded Encryption
	SATCOM/LOS			
	(ARC 231)			
	DASR	2	1	Required only if mission dependent.
	HF (ARC 220)	2	1	Required only if mission dependent.
1.	Encryption Devices	1	0	NOTE: VHF/UHF encryption devices are embedded within the radio, therefore the radio must be present and operational for encryption capabilities. STE Encryption
2.	Antenna	2	1	(M) (O) The appropriate antenna for the mission must be operational.
3.	Workstation 1,2,3	1	1	(M) (O) The ICS must be operational.
4.	Workstation 4	1	1	(M) (O) The following is required for operations: a) The Power Distribution Unit (PDU) must be operational. b) The ICS must be operational. c) The UHF/VHF/SATCOM control heads must be operational.
5.	Patch Panels	2	2	Red is required.
6.	Cockpit Mission Power Panel	1	1	NOTE: This is an airframe item, which is critical to the mission.
7.	Generators	4	2	For HISAR missions, generators two and three must be operational.

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits, or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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VOICE-COM UHF/VHF/SATCOM/DASR/HF Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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SYSTEM & SEQUENCE NUMBERS		1. ITEM		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS	
160. COMINT MISSION WORKSTATIONS		1. Workstation		2	1			a) ART 1550 Workstation Chasis must be operational if additional receivers are mission dependent. b) VME Chasis must be operational if DF is required for mission. c) Both workstations required for DF mission.	
		2. Digital Audio Recorders (PMEZ)		1	0			Required only if mission dependent.	
		3. Intercept Receiving HF		2	1			As determined by Commander.	
		VHF & UHF		4	1			As determined by Commander.	
		SRE 1		1	0			As determined by Commander.	
		SRE 2		0				Not installed.	
		4. Intercom System		1	1			a) If Intercom at WS-1 or 2 is inop Global must be operational.	
		5. Interference Cancellor		1	1				
		6. DF Capability		1	0			Required only if mission dependent. Both workstations required for DF mission.	

Placard Requirements

"Inoperative (*specific title of the inoperative system*)" must be placarded with letters 1/8 inch or larger and the placard placed near the inoperative equipment.

Operating Procedures

Prior to mission initiation:

1. If time permits, or if equipment presents a safety hazard, remove equipment, cap all connections and tie-back all cables (as appropriate).
2. If time does not permit and/or equipment does not present a safety hazard, continue mission with equipment installed.

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COMINT MISSION WORKSTATION Continued —

Maintenance Procedures

1. Verify defective equipment, cables, and components.
2. Remove defective components.
3. Tie-back all cables (if applicable).
4. Cap/protect all cable connections.
5. Pull circuit breaker (if applicable).
6. Place tie-wrap around circuit breaker (as appropriate).
7. Make entry in the appropriate maintenance manual.

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List of Abbreviations, Acronyms and Unusual Terms

AAC	Acquisition Analysis Control
AAE	Advanced Avionics Equipment
ACFT	Aircraft
ACP	Antenna Control Panel
ACQ	Acquisition
ACU	Acquisition Control Unit
ADF	Airborne Direction Finding, Automatic Direction Finding
ADL	Airborne Data Link
ADRG	ARC Digitized Raster Graphics
ADU	Audio Distribution Unit
AEU	Avionics Electronics Unit
AGC	Automatic Gain Control
AGL	Above Ground Level
AIRTAPS	Aerial Imagery Reconnaissance Tracking and Plotting System
ALSE	Aircraft Life Support Equipment
AM	Amplitude Modulation
AMES	Airborne Mission Equipment Subsystem
ANT	Antenna
AOA	Angle of Arrival
AOR	Area of Operational Responsibility
APMES	ARL Prime Mission Equipment Subsystem
APS	Airborne Platform Subsystem
APU	Auxiliary Power Unit
ARDF	Airborne Radio Direction Finding
ARL-M	Airborne Reconnaissance Low-Multifunction
ASAS	All Source Analysis System
ASE	Aircraft Survivability Equipment
ASM	Audio Switch Matrix
ASU	Antenna Switch Unit
ATC	Air Traffic Control
ATE	Automatic Test Equipment
ATTN	Attention, Attenuation
AUX	Auxiliary
AWS	Airborne Workstation
BFO	Beat Frequency Oscillator
BII	Basic Issue Items
BIT	Built-in Test
BITE	Built-in Test Equipment
BPF	Bandpass Filter
BPS	Bits Per Second
BPSK	Biphase Shift Keying
BRT	Brightness
BW	Bandwidth

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CB	Circuit Breaker
CCA	Circuit Card Assembly
CCD	Charge Coupled Device
CCI	Controlled Cryptographic Item
CCU	Console Control Unit
CCW	Counter Clockwise
CD	Compact Disk
CDS	Communications Data Switch
CDU	Control Display Unit
CEIU	Communication Equipment Interface Unit
CH, CHAN	Channel
CLS	Contractor Logistic Support
CMOS	Complimentary Metal Oxide Semiconductor
COEI	Components of End Item
COMINT	Communications Intelligence
COMM	Communications
COMSEC	Communications Security
CONOPS	Concept of Operations
COR	Carrier Operated Relay Threshold
CPU	Central Processing Unit
CSCI	Computer Software Configuration Item
CT	Cypher Text
CTRL	Control
CW	Continuous Wave
DAT	Digital Audio Tape
dB	Decibel
DCU	DIS Control Unit
DCW	DMA Map of the World
DEG	Degree
DF	Direction Finding
DFKL	Direction Finding Klieglight
DIE	Digital Image Enhancement
DIS	Daylight Imaging Sensor
D/L	Data Link
DLED	Digital Link Encryption Device
DMA	Defense Mapping Agency
DMS	Degrees, Minutes, Seconds
DNR	Digital Noise Reduction
DPU	Digital Processor Unit; Data Processor Unit
DS	Directed Search
DSP	Digital Signal Processor
DTD	Data Transfer Device
DTED	Digitized Terrain Elevation Data
DTU	Data Transfer Unit
ECCM	Electronic Counter-Countermeasures
ECM	Electronic Countermeasures

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EEP	Elliptical Error Probability
EIR	Equipment Improvement Recommendation
ELINT	Electronic Intelligence
ELT	Electronic Light Table
EMC	Electromagnetic Compatibility
EMI	Electromagnetic Interference
EO	Electro-Optic
EOM	End of Message
ERF	ECCM Remote Fill
ESM	Electronic Support Measures
ETI	Elapsed Time Indicator
FF	Freeze Frame
FFP	Freeze Frame Processing
FLD	Field
FLIR	Forward Looking Infrared
FM	Frequency Modulation
FOD	Foreign Object Damage
FOR	Field of Regard
FOV	Field of View
FREQ	Frequency
FSK	Frequency Shift Keying
GHz	Gigahertz
GIST	Geographic Information System Task
GMT	Greenwich Mean Time (Zulu Time)
GPS	Global Positioning System (NAVSTAR)
GS	General Search; Ground Speed
GUI	Graphical User Interface
HF	High Frequency
HISAR	Hughes Integrated Synthetic Aperture Radar
H'MIC	Hot Microphone
Hz	Hertz
ICS	Intercommunications System
ICW	Intermittent Continuous Wave
IEWCS	Intelligence & Electronic Warfare Common Sensor
IF	Intermediate Frequency
IFR	Instrument Flight Rules
IFSM	Intermediate Frequency Switch Matrix
IIR	Imagery Interpretations Report
IIRM	Imagery Interception Report Message
IMINT	Imagery Intelligence
ININT	Initialization
INS	Inertial Navigation System
INTCP	Intercept
INTERCOM	Intercommunications
I/O	Input/Output
IR	Infrared

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IRLS	Infrared Line Scanner
JPEG	Joint Photographic Experts Group
KBPS	Kilobits Per Seconds
KHz	Kilohertz
LAN	Local Area Network
LAT	Latitude
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LOB	Line of Bearing
LON	Longitude
LOS	Line Of Sight
LSB	Lower Side Band
LUT	Look Up Table
MA	Mission Analyst
MCDR	Multichannel Digital Recorder
MCRFP	Multichannel Radio Frequency Processor
MCU	Modem Control Unit
MGRS	Military Grid Reference System
MGSM	Medium Ground Station Module
MHz	Megahertz
MIC	Microphone
MMI	Man-Machine Interface
MS	Mission Supervisor
MSL	Mean Sea Level
MSU	Mass Storage Unit
MTI	Moving Target Indicator
MUX	Multiplexer
N/A	Not Applicable
NCD	Net Control Device
NCS	Net Control Station
NFOV	Narrow Field Of View
NiCad	Nickel/Cadmium (NiCd)
NITF	National Imagery Transmission Format
NM	Nautical Mile
NRP	Net Radio Protocol
NSS	Narrow Sector Search
OOTW	Operations Other Than War
PACS	Primary Air Conditioning System
PCR	Power Conditioning
PCU	Power Conditioning Unit
PDU	Power Distribution Unit
PIR	Priority Imagery Report
PMCS	Preventive Maintenance Checks and Services
PME	Prime Mission Equipment
PPS	Pulse Per Second
PSK	Phase Shift Keying

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PT	Plain Text
PTT	Push To Talk
PWR	Power
QTY	Quantity
RAM	Random Access Memory
RCVR	Receiver
REF	Reference
REM	Remote
RF	Radio Frequency
RFD	Radio Frequency Distribution
RGB	Red Green Blue
RGDS	Radar Ground Display System
ROI	Region of Interest
ROM	Read Only Memory
RSR	Radar Service Request
R/T	Receiver-Transmitter
RTCL	Reticle
RX	Receive
SAR	Synthetic Aperture Radar
SATCOM	Satellite Communications
SCSI	Small Computer System Interface
SDA	Signal Distribution Assembly
SDU	Spectral Display Unit
SEWS	Secondary Exploitation Workstation
SH	SuperHawk, Super Hawk
SHF	Super High Frequency
SIGINT	Signal Intelligence
SINCGARS	Single Channel Ground and Airborne Radio System
SMM	Signal Monitor Module
S/N	Signal to Noise Ratio
SOI	Signal of Interest
SOP	Standard Operating Procedures
SOR	Set-On Receiver
SQL	Squelch
SSB	Single Side Band
STBY	Standby
STD	System Technical Directive
STOL	Short Take-Off/Landing
STRU	System Timing Reference Unit
SVC	Secure Video Compressor
SYSCON	System Control
TACO	Tactical Communications Protocol
TACREP	Tactical Report
TDE	Turret Drive Electronics
TKL	Tipper Klieg Light
TLV	Threshold Limit Value

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TMDE	Test, Measurement, and Diagnostic Equipment
TOI	Target of Interest
U/I	Unit of Issue
U/M	Unit of Measure
UHF	Ultra High Frequency
UPP	Universal Patch Platform
UPS	Uninterruptable Power Supply
USB	Upper Side Band
UTM	Universal Transverse Mercator
UV	Ultraviolet
VCR	Video Cassette Recorder
VDS	Voice Data Switch
VFR	Visual Flight Rules
V/H	Velocity to Height Ratio
VHF	Very High Frequency
VME	Versa Module Eurocard
VOL	Volume
VSWR	Voltage Standing Wave Ratio
VSM	Video Switch Matrix
WAMTI	Wide Area Moving Target Indicator
WB	Wide Band
WFOV	Wide Field Of View
WGS	World Geodetic System
WS	Workstation
XHI	Transmit, High Power
XLO	Transmit, Low Power
XMT	Transmit
XMTR	Transmitter